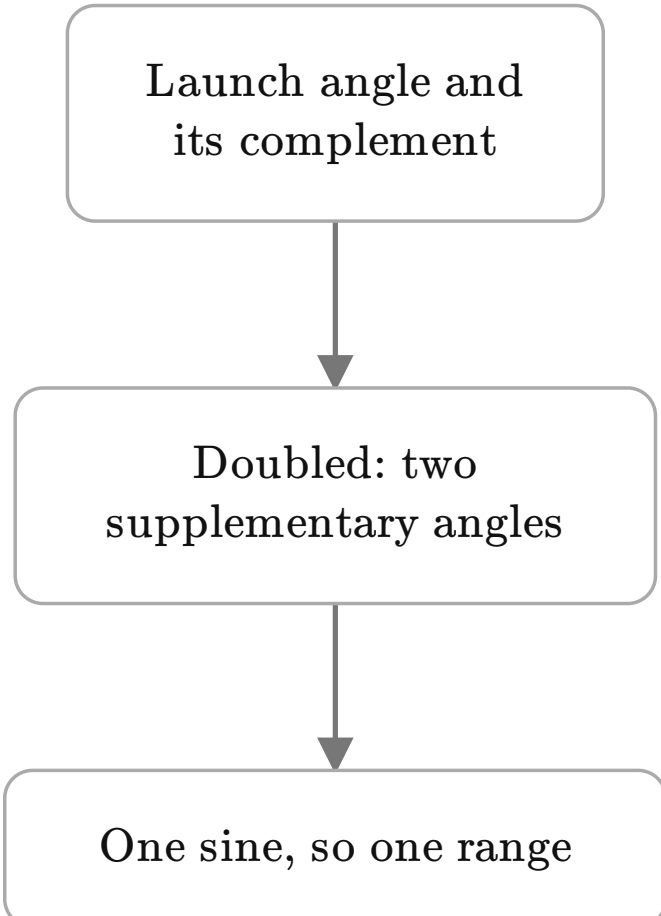

Launch angle and its complement
Doubled: two supplementary angles
One sine, so one range